BOREAL MISTITUTE

Needles single

Drawings by G. F. Harcombe

Rec'd: May 22/19 Order No.: Price: Gift Acc. No. B.c. Ministry of the Environment. Heads or seal

STATIOSPEDIOS

Trees with Meedles, needles usually more than in Long, Fruit a woody come (about I' long) or fleshy berry having a pore at top

Meedles in groups of 2

A. Pinus contorts Dougl.
var. Intifolis Engals.
[lodgepole pine]
1-Comes whert (approximately 2° with
distinct Mater pricises at bardened
2-leadles about 3°.
3-Trees of relatively open foliage,
gregish green.
Leart light-from to dark-brown,
finely created at the base of
the remainders, over flarty over
the remainders, over flarty over

Pinus contorta Dougl. var. contorta (shore pine)

1-Leaves dark green. 2-Contorted tree restricted to coastal areas.

B. Pinus banksians Lamb.

1-Comes 1" to 2" long often curved, assymetrical, without prickles at scale tips. 2-Needles approximately 1.5" long. 3-Trees somewhat contorted. L-In B.C. restricted to north-east (Feace River ares).

Needles in groups of 3

A. Pinus ponderosa Laws,

(ponderosa pine)
1-Cones more than 3" long and
approximately 2/3 of length wide
2-Needles usually more than 3"

Needles in groups of 2 or more pines and larches

2-Needles usually sore than 3" long.
3-Trees of somewhat open greyish-greem follage.
4-Bark thick with deep cracks.
6-Trange-brown in cracks and ex-posed surfaces, darker in colour then young.
5-Restricted to lower elevations of dry southern \$ of 8.6.

B. Pinus albicaulis Engelm.
(white bark pine)

Needles in groups of 5

A. Pinus sonticols Dougl.

(western white pine)
1-Cones elengate usually more than 4.5°
Long, more than twice as long as broad, slightly curved.

plates. 5-In interior wet belt and coastal forest.

(white bare pine)
-(cone 1:5' to 6" long, purple, oveid,
-(cone 1:5' to 6" long, purple, oveid,
-(cone 1:5' to 6" long, purple,
-(cone 1:5' to 6" long, purple,
-(cone 1:5' to 6" long, purple
-(cone 1:5' to 6" long, pu

C. Pinus flexilis Vanes (Linber pine) 1-Cones diagnets 3* to 8* long. 2-Mescales 1.5* to 1* long. Alightly 3-Sakk on young stems, mooth, gray or silvery-while, becoming rough dark brow to shoot black, deeply fisured into wide scaly plates. 4-Contocted unialpine to alpine tree of

Needles in groups of more than 10

A. Larix laricina (Du Roi) K. Koch (tamarack)

1-Cones almost spherical in to 1"

1-Cones almost opherical of to 1 incg.
1 incg.
2-lease twicing valley incg, light
2-lease twining valley in automotion.
1 clusters of 10-DO on older
twings.
3-In SL. restricted to northern
half. Restricted to book in
2-lease of 10-DO on older
twinings.
3-In SL. restricted to sorthern
half. Restricted to book in
2-lease of 10-DO on older
twinings.
3-In SL. restricted to sorthern
half. Restricted to book in
2-lease of 10-DO on older
twinings.
3-In SL. restricted to sorthern
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1-lease on the sorthern older older
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sorthern older older

B. Larix lyallii Farl.

(alpine larch)

1-Cones elongate approximately 1"
long, 1.5 to 2 times longer than wide.

2-In 8.C. at high elevation of

2-In SLC, as high elevation of alpice turnies curyus, and now alpice turnies and now a consideration of the control of the con

Larix occidentalis Nutt.

(western larch)

1-Cones less than 1.5" long, yellowish-brown when mature. Scales usually covered on lower ball with a dense conting of white hairs when young.

2-Needles less than 1", in clust-

2-Meedies less than I", in clust-ers of 14-30 on older tags.
3-Tree of open yellowish-green follage, usually somewhat cylin-drical in form when nature.
4-Lower to medium elevations of the interior wet belt and the adjacent Columbia forests.

Needles blunt, not sharply pointed

Needles rounded at tip [hemlocks]

A. Tough beterophylis (Natr) Sorp.
[western Manloon Mon. 17 Sorp.
[western Manloon Mon. 17 Sorp. scales
thin Kith Sorp or Yests way objects.]
2-leaves flattened, round-speed appearing
2-reaves flattened, round-speed appearing
2-reaves make variable in length up
abruphly narrowed bear, lighter lines
or under surject see 1500-1500 high) with nar3-large trees (1500-1500 high) with narleasing.

leader.
4-Young trees with rusty-brown bark cov-ered with fine scales. Older trees with darker bark having flat, scaly ridges with deep furrows. 5-Cosstal forests and interior wet belt.

B. Tsugs mertensiana (Bong) Carr.

[mountain hemics])
1-Gene cylindrical more than 1º long,
purple, brownish-purple, scales elightly
thicked.
2-Leaves semi-circular in cross section,
projecting out all around the twis.
3-East lare (23°-25° high).
4-Eart dark reddish brown rough ...
hard, narrow, rounded ridges.
5-Cassi forests and interior web bit.

Needles notched at tip true firs

A. Abies lasiocarpa (Hook) Nutt,

1-Cone dark-purple, 2"-4" long, somewhat wider near the base,

somewhat wider near the base, scales fan shaped. 2-Bark smooth, grey with resin blisters, old trees with shallow longitudinal furrows. 3-Needles about 1.5" long, dark-green with 2 silvery strips undermesth, usually curred upward in beach tips. 4-One titled harrow spire-like

form. 5-Throughout Province in sub-alpine boreal and sub-boreal forests.

B. Abies amabilis (Dougl.) Forb.

Tembell (T)

1-Conss ment, gark-purple, cylindrical M-59 long, Scales fan shaped.
2-Meedine dark-shiny-green, upper side, pointing forward, should be suffered the shaped of the shaped

Ables grandis (Dougl.) Lindl.

(gree first)

- (gree yilingirel yellow-green
with broader than long telles

- (green first)

- (green first

Needles printed at apex
Thigs rough due to left-over per-like leaf bases, leaves more or less i-sided, wiff and prickly. (NEEDERS)

A. Pices engelmannii Parry.
(Engelmann spruce)

[Engelsker sprice]

-[come shot 27 long, order of scales distinctly regged, comes attached at tips of branches, never forming a dome cluster.

-[come shot 27 long, wight with relative.]

-[come shot 27 long, wish with relative.]

Locally stateded scales.

-[come shot 28 long, washly covered upsard.

-[come shot 28 long washly covered washl

E. Pices (Discock) (Month) Yous.

(Milet sprue)

1-com shout 22 long, scale edges transite and month (hybride, between A and B

1-com shout 22 long, scale, sought by Intermediate features).

2-tong twigs month or only sper sly half,

2-tong twigs month or only sper sly half,

1-dy-2/4 long, blue-preen sharp pointed needles.

5-tree come shaped.

6-Northern and central and south-east R.C. east of Counsels.

C. Pices mariena (Mill) B.S.P. (black spruce)

O. Pices sitchensis (Bong) Carr.

Twigs smooth (not leaving pag-like leaf bases)

Shrabs or low trees usually less than 20' high, leaves 2-ranked, fruit a fleshy berry.

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Trees with woody cones, leaves not 2-ranked, twigs with oval leaf scars.

A. Pseudotsuga mensiesii (Mirbal) Pranci (Douglas fir) 1-Cones 2"-4" long, oval, pendent bracts 3 toothed, longer than the

scales.
2-Young bark smooth, grey-brown with resin blisters, older bark thick (up to 10"-12") corky and cracked, deeply fissured into reddish brown ridges.

ridges.

-Needles more or less flattened,
Leave eval sars on mooth tadge,
bright-green and grooved above,
paler balow.

L-Throughout the interior at low to
medium elevations in well drained
positions and drier parts of
cosstal area.

A. Their plicate form:
Levetern red cedar?
Levetern red cedar?
Levetern red cedar?
Leader over team a few (?) Prising
Prise a central acts.
Leave overlapping scale-live, blunt,
in pairs, derry yellow-green. Crushed
Levetern war forming long. Itspose shreds with a network of narrow
Lateractical redges.
Leavening overlapping scaleLeavening overlapping scaleLeavening overlapping scale
Leavening scale
Lea

B. (Chasecoprate productionals Space).

[Valley color)

Fruit a berry, bluish-black when mature, without a pore at top.

Having short (about 10) Scale-like or Awl-like leaves which are some or less pressed, fruit a berry or a small cone (about 10)

A. Amiperus scondorum Sarg, (Booky Montain Juniper), (Booky Montain Juniper), (Booky Montain Juniper), I-ruit a filesty green to derbible (when nature) berry usually shift rhows off, lackfug as opening at the end.

- Troug branches with short prickly really leaves, attached 1.1a. about leaves, rose services, and the control of the lack of t

sed Scarce reaves, no prickly.

3-Bark thin fibrous, red-brown to gray-brown, divided by shallow furrows.

4-Generally shuth or small

tree less than 20' high, with one to several stems giving a conical form. 5-In dry central and south interior

B. Juniperus communis L. (common juniper) 1-Prickly awl shaped leaves arranged in three's.

In three's,
2-Neyer a tree, often speeding
over ground with the branches
turned upward. Young and nature
foliage cimilar.
)-Fruit, a fleshy green to dark
blue berry (when nature) usually
with a distinct silvery bloom
which rubs off.

-Thin reddish-grey bark with

scales. 5-Throughout B.C. at low to medium



deciduous evergreen

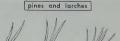




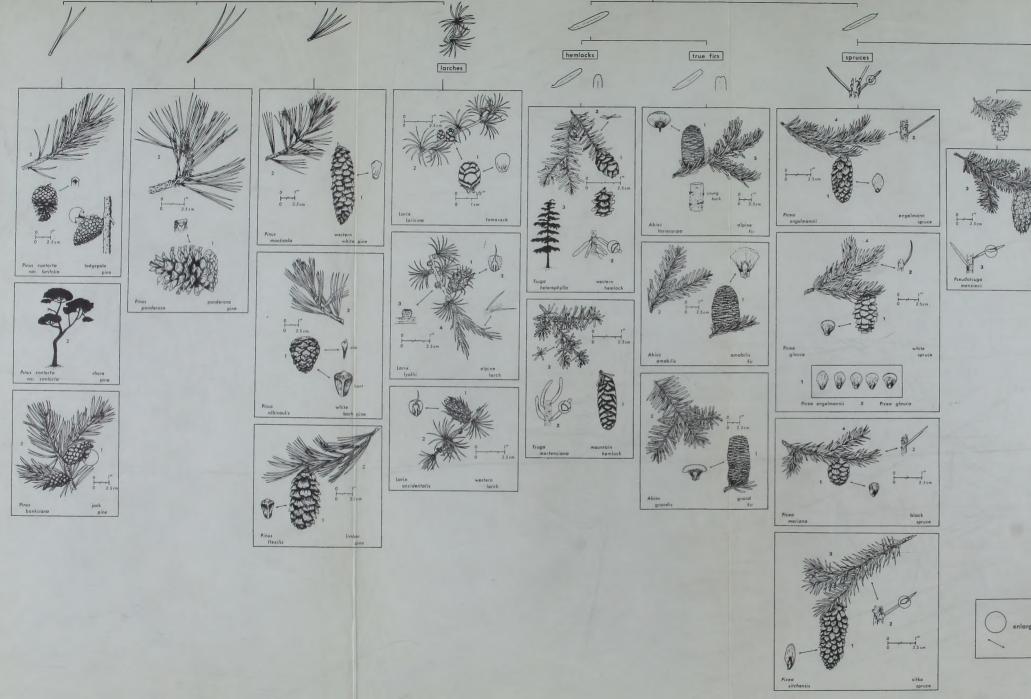


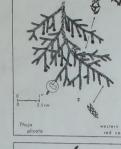


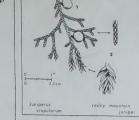


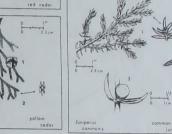












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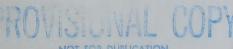
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